PATENT

REMARKS

Acknowledgement of the priority papers and the acceptance of the drawings is noted.

Responsive to the objection to the disclosure, the suggested corrections have been made.

Responsive to the objection to Claim 3, the requested spelling change has been made.

Responsive to the rejection of Claims 1-35 under 35 U.S.C. § 112, second paragraph, minor amendments as to form have been made to independent Claims 1 and 25 to reflect the clearly illustrated and described preferred embodiment arrangements where the axial direction refers to the axis of the tubular jacket.

The rejection of Claims 1, 2, 4, 6, 7, 9, 15, 16, 18, 19, 21, 24-27, 29, 30, and 32-35 under 35 U.S.C. § 102(b) as being anticipated by Hancock '877 is hereby traversed and reconsideration is respectfully requested.

The following is a comparison of the present invention and Hancock '877, including a discussion of the claim language deemed to clearly patentably describe novelty of the invention as compared to Hancock '877.

The present invention relates to a steering column for a motor vehicle having a steering shaft rotatably mounted in a tubular jacket. More specifically, the present invention relates to an improved arrangement for accommodating dissipation of collision forces in the event of an accident with displacement of the tubular jacket. As described in the Background section of the present application,

there have been many arrangements, including arrangements such as rolling friction of deflected members, to absorb collision injuries on steering columns. According to the present invention, a particular compact construction is provided by disposing the steering column surrounding the steering shaft to be supported between a pair of rails, with at least one of these rails being provided with a plastically deformable deformation element that is deformed by rolling friction via deflector structure fixedly disposed on the tubular jacket and deflection structure fixed to the tubular jacket (Claim 25). See Paragraph [0007], [0016], and [0018] for a summary of the structural arrangement and advantages of the preferred embodiments of the present invention in so far as compact construction and reliable absorption of the collision courses.

Hancock, U.S. Patent 5,517,877, relates to a collapsible steering column assembly wherein the tubular jacket 4 supporting the steering shaft 3 is secured to the adjacent vehicle body at a bracket on one lateral side of the steering column (Compare Column 2, lines 12-14, discussing the provision of means to absorb collapsed energy transferred from the immediate surround of the steering column to the region of the mounting bracket). Thus, Hancock '877 would not have the described structure and advantages of preferred embodiments of the present invention with respect to the structural space utilization and the sufficiency of energy absorption discussed at Paragraph [0018].

As can be seen from the above summary of Hancock '877 and the present application, Hancock '877 differs in that the deformation element and the guide rail

PATENT

support are at one lateral side of the steering column and steering shaft where it is connected to the vehicle body parts, while the present invention involves the support of the steering column between a pair of guide rails supported at the vehicle Each of independent Claims 1 and 25 positively recite this body structure. arrangement with the tubular body of the steering column assembly supported between the pair of rails and therefore these claims clearly define patentable novelty as compared to Hancock '877. Accordingly, it is respectfully requested that the rejections of these claims under 35 U.S.C. § 102 (b) be reconsidered and withdrawn.

The rejection of Claims 3, 5, 8, 17 and 23 under 35 U.S.C. § 103(a) as being unpatentable over Hancock '877 is hereby traversed and reconsideration thereof is respectfully requested. In addition to the novelty recognized in this rejection with respect to these dependent claims, see the above comments regarding the basic novel different structure of the independent claims as compared to Hancock '877. Further there are no teachings within Hancock '877 which would suggest to one skilled in the art to make the modifications necessary to meet the terms of these dependent claims, and therefore these dependent claims should be considered as clearly patentable over Hancock '877. With respect to Claim 23, it is submitted that the specific forward travel dimensions take into account the environment of the invention and, absent teachings in the prior art, involves more than the mere discovery of an optimum value involving only routine skill in the art.

Kall verser

PATENT

The rejection of Claims 10-13, 14, 20, 22, 28 and 31 under 35 U.S.C. § 103(a)

as being unpatentable over Hancock '877 in view of Li et al. (U.S. Patent 6,322,103)

is hereby traversed and reconsideration thereof is respectfully requested. Although

Li et al. '103 may suggest the use of a sheet metal strip deformation strip, Li et al.

'103 lacks any teachings or suggestion of the above-described features of the parent

claims missing in Hancock '877, especially concerning the specific orientation of the

steering column tubular shaft between a pair of supporting rails, rather than

laterally at one side thereof as is the case with Hancock '877.

In view of the foregoing amendments and remarks reconsideration and

favorable action of all the claims is respectfully requested.

If there are any questions regarding this amendment or the application in

general, a telephone call to the undersigned would be appreciated since this should

expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a

petition for an Extension of Time sufficient to effect a timely response, and please

charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-

1323 (Docket 225/50312).

Respectfully submitted,

June 4, 2003

Donald D. Evenson

Registration No. 26,160

CROWELL & MORING, LLP

P.O. Box 14300

Washington, DC 20044-4300

Telephone No.: (202) 624-2500

9